

MINUTES OF THE MILWAUKEE RADIO AMATEURS' RADIO CLUB, INC.

Dear Board,
The Meeting was called to order by Pres. Howell, and the minutes were read.

Pres. Howell announced that he had appointed Mr. Metcalf chairman of the technical committee to replace Mr. Doll who has become Chairman of the Traffic Committee.

Mr. Baird read an interesting article from a 1914 magazine, which was the first publicity ever given the ARRL. Chrm. Cate of the Mem. Comm. urged that the Holiday Slump in the Membership Drive be forgotten and new members be brought in.

Mr. Crapo asked for any Transatlantic receiving records. He announced that there were still a number of G.R.S. certificates to be given out, and asked anyone desirous of getting them to let him know. He asked that reports come in more regularly.

A list of amateur wavelengths observed at 9BKR showed that 75% of Milwaukee's amateurs were over 200 meters. Dist. Supt. Doll announced that a trophy would soon be offered for the Wisconsin station handling the most traffic.

Mr. Howell announced that at a future meeting, Mr. E.J. Marx and Mr. Flewelling would address the club. He also read a letter from R.E.G. Matthews thanking the club for its hospitality. He also read a letter from A. Schaeffer ex9CZY stating his regret at not being able to be present at the Club Dinner. Mr. Sierpinski, 9GRA read a letter that he received from Eng. 6LJ who heard 9CZY in London on two tubes, in daylight, with a badly shielded serial. 9AGT of Stevens Point was present and gave us a few words on co-operation with other Wisconsin stations.

Mr. Metcalf gave a report on the transmitter of 1XAD.

Mr. Jack Knight of the Western Electric, told us a little of his company's activities in Radio work, and offered to secure speakers for future meetings from the engineering staff of that company.

Mr. Howell announced that the alleged transatlantic reception that the papers credited his station with was rather doubtful. Mr. Lethrop of the tech. comm. then gave a very interesting talk on locating induction from power lines etc. Mr. Griesbacker again urged that we try to get

a spark-free air condition in the first Wis. Dist.

Mr. Howell brought before the meeting a newspaper article giving him a great deal of adverse notoriety. He asked that the author of the newspaper tip admit his action. Upon receiving no response, he tendered his resignation as President, Chairman of the Board of Directors and Chairman of the Program Committee to the Secretary. A Number of members protested this action, asking Mr. Howell to reconsider. The Secretary, in the absence of the Vice President, called a meeting of the Board of Directors, and the meeting adjourned.

MINUTES OF THE BOARD OF DIRECTORS.

The Meeting was called to order by the Sec., Mr. Doll acting as scribe. The matter of the cause of the notoriety was brought up, and immediately dropped as not concerning the Board which was only interested in the outcome. All agreed that Howell was the best man for President, and that some measures should be taken to get him to reconsider. A Motion was passed, that the Board go on record as not accepting the resignation of Mr. Howell, and believing that the adverse notoriety received by Mr. Howell had nothing to do with his holding office in the club. A Committee of Messrs. Crapo, Catel, and Polacheck was formed to approach Howell to get him to reconsider his action. It was decided that no further publicity be given the matter nor the Board's stand on the situation. It was decided that the committee wait one week until Mr. Howell had sufficiently calmed himself to receive the suggestion of returning. It was decided to make the meeting at which Messrs. Marx and Flewelling would be present a BCL meeting at which speakers from the traffic committee present the amateur situation. The Secy. was instructed to notify Mr. Szukalski that he was to conduct the next meeting. The meeting adjourned at 9:55.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of January 10, 1924.

The meeting was called to order by Vice Pres. Szukalski, and the minutes of the previous meeting were read.

Mr. Szukalski announced that Mr. Howell had declared his intention of resuming the chair at the next meeting.

Business Manager, Mr. Hillegas-Baird read a letter from a Los Angeles Radio Publication, asking for Technical Committee Reports for publication at the usual rates. He read the announcement of the election of directors of the Canadian Radio Relay League, and also asked that ARRL applications be placed thru him since the publicity dept. was staging a contest. He announced that the Government had offered for sale to the club and its members, apparatus and equipment of naval radio stations at Duluth and Milwaukee.

Chairman Rose of the Publications Committee reported that there were so many magazines on the market which contained so little valuable information that he had difficulty preparing reports. He read an article explaining the principle of push-pull amplifiers.

The Treasurer reported a cash balance of \$10.10.

Mr. C. F. Kraemer was admitted to associate membership.

Mr. Ben Chromy 9CJO, formerly of Minneapolis, gave a very instructive report, complete in every detail, in regard to tests of short wave transmission made in that city. In his informative talk, he gave much valuable data on 150 meter transmission and reception, and he received encouraging applause on this his first technical talk.

Mr. Cetel supplemented the talk with a little data gained from the experiments of Mr. Kruse.

Mr. Szukalski also had a few suggestions to offer after which the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' RADIO CLUB, INC.

Jan. 17th, 1924. The meeting was called to order by Pres. Howell.

Mr. Howell explained that he had reconsidered his hasty action in resigning and had withdrawn his unaccepted resignation. The Secretary then read the minutes of the previous meeting.

Mr. Baird reported that the N.Y. Evening American had written him for technical articles for publication. He also read an ARRL communication stating that no publicity should be given ship interference that would jeopardize amateur standing among Congressmen.

Mr. Cate reported eight new applications for membership, and awarded to Mr. Hilleags Baird his third ARRL pin.

The Secretary proposed for membership the following: Todd Lund for Junior Membership; Edward Ink, Murrie A. Brown, R.H. Ford, and A.E. Jackson for Associate membership, and Merritt H. Mc Coy, E.L. Beaver, and Weldon Olsgard for regular membership. All were voted into the club.

The Treasurer reported \$17.60 in the treasury.

Messrs. Howell and Baird urged that rotten ham fence be eliminated from the ether of Wis. District no. 1.

Mr. Howell read a card from 1AAC telling how he worked SCVI with a UV201 with 800 volts on the plate.

Mr. Szukalski announced a traffic meeting for Jan 25th and said that ORS Certificates would be given to only those present. He also told how he satisfied a BCL by locating and putting out of business an leaky lightning arrester, thereby stopping ham interference.

Slides were then shown of pictures taken by Mr. Howell. The first slide was of Messrs. Parkhurst, Marco, and Mathews. The others were of Station 9ELV, and were explained by the owner of the station.

After a general discussion the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Jan. 24, 1924. The meeting was called to order by Pres. Howell. The minutes of the previous meeting were not read due to the absence of the Secretary. Bus. Mgr. Hillegas-Baird again urged members of the technical committee and other members to write out reports of their researches so that he might submit them for publication in the many radio magazines asking for material.

C.M. Szukalski announced that a traffic meeting would be held on January 25th, and stated that C.R.S. certificates would not be issued to those who did not attend.

A.D.M. Crapo reported that he had received reports from all districts, and that SALY lead the state this month with 213 messages handled in 13 days.

D.S. Doll reported that 9BKR lead District No. 1 for the month. Mrs. Helen Wiseman was admitted as Assoc. Member.

The Treasurer reported a balance of \$3.10.

Technical Comm. Chrm. Metcalf reported on the making of transformers for amateur work.

Mr. Howell then read an intensely interesting paper on Antenna Resistance Measurement, in which he showed the importance of this factor in amateur installations, and gave a practical method of carrying on the measurement of Resistance and Capacity of an antenna system.

After a general discussion, the meeting adjourned.

MINUTES OF THE BOARD OF DIRECTORS OF T.M.R.A.C.

The meeting was called to order by Pres. Howell.

Mr. Hillegas-Baird asked that a city publicity correspondent who will also be Publicity Chairman for the club, be appointed to succeed himself. Mr. Doll was the only candidate and received a unanimous vote of approval from the board. He is to receive the club typewriter for publicity work.

The matter of purchasing Addressograph stencils was brought up but deemed inadvisable at the present time.

The meeting then adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' RADIO CLUB, INC.

January 31st 1924.

The meeting was called to order by Pres. Howell and the minutes of the two previous meetings were read.

Chairman Catel of the Membership Committee announced that his goal had been reached and the membership had been more than doubled since the beginning of the season. He urged that the membership be tripled by the close of the season.

The treasurer reported a cash balance of \$36.10.

The Secretary read the report of Mr. Metcalf of the Traffic Meeting held on January 15th.

Mr. Miller of the Papers Committee read an article from an English Radio Publication which had extensive reports of the logging of American Amateurs.

Mr. Metcalf, Technical Committee Chairman, gave a short informative talk of Tungar Rectifiers and illustrated the method of constructing transformers for use with it, and the circuit employed.

The Secretary announced that most of the membership certificates were ready for distribution to members in good standing.

The Program Committee reported a full slate of speakers for this month, and promises for next month.

Mr. Chromy SCJE then gave an intensely interesting report on the alkali-vapor tubes developed by the University of Illinois, with data on their operating characteristics and the differences between them and the high vacuum tubes of the usual types. He showed how they excelled as detectors, amplifiers and oscillators, and could be successfully operated without any B battery.

A discussion of involved "pet" receiving circuits was started by the Secretary and brought out many interesting points, and held the interest until the time for adjournment.

The meeting then adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' RADIC CLUB, INC.

February 7th 1924.

The meeting was called to order by Pres. Howell, and the minutes were read by the Secy.

Chrm. Fred Catel of the Membership Committee reported having sent out letters to all liscenced amateurs not already club members, urging them to join.

Mark Doll, Publicity Chairman, reported that the Journal had started a column called "Ham Chatter", and asked that all material for this column be sent to him.

C.M. Marian Szukalski Jr. reported that an effort was being made by the traffic committee in co-operation with the Radio Inspector to abolish all unlisenced transmitters. He also asked that unnecessary communication be minimized and tone-wheel and microphone modulation be discouraged.

Chrm. Metcalf of the Tech. Comm. described a low-loss short wave receiver that he had constructed, according to one of the suggestions in QST.

A.D.M. Crapo described his short wave receiver which he had on display.

Mr. Howell, Program Comm. Chrm. reported that the next meeting would be known as ECL Night, and every effort was being made to make it the largest meeting in the clubs history. Speakers are to be David Grimes, E.T. Flewelling Harry J. Marx, and The Mystery Man of the Miloplex Circuit.

Mr. Mueller of the Publications Comm. reported on two Canadian Radio Magazines.

The Treasurer reported a cash balance of \$42.60.

Next three talks were given by the operators of stations 9ELD, 9CKW, and 9ATO describing the construction and operation of these stations. The talks were illustrated by slides made by Mr. Howell, and they were very interesting and instructive.

An announcement was made that station 9ATO had worked WNP on Feb. 5th. This was vigorously applauded as a wonderful record.

Mr. Catel introduced the idea that the club nominate a candidate for A.R.R.L. Director for the Central Division. Mr. Howell Stated that Mr. Crapo was the best able to run for this important office, and a motion was passed nominating

him for this office.

A letter was read which Central Division Manager R.H.G. Mathews praised the work of Wisconsin in ~~the number of messages~~ handling and emergency storm work.

After a general discussion, the meeting adjourned.

Minutes of the Milwaukee Radio Amateurs' Radio Club, Inc.

February 14, 1924.

BCL Night was opened by President Howell with a welcome to the many visitors who made up a part of the two hundred persons who crowded the Trustees Room to the overload limit. He expressed his regret that the larger Lecture Hall was not available and that many were forced to stand.

Since the regular order of business was suspended for the evening, Mr. Harry J. Marx was introduced by the President, and thanked for his efforts in bringing the other speakers to Milwaukee.

Mr. Marx, after telling of the hearty welcome that his party had received in Milwaukee, gave a very concise view of Modern Radio Receiving Circuits and their Efficiencies. He spoke of the Regenerative, the Super Regenerative, the Reflex, the Neutrodyne, and the Superheterodyne, finding both good and bad points in all of them. One thing that he brought out above all was that cheap inefficient parts greatly reduced the efficiency of any circuit.

Mr. Marx then introduced Mr. Edmund T. Flewelling, the next speaker. Mr. Flewelling gave a very informal talk which made ~~one~~ ~~at~~ everyone feel at ease. His subject was the Efficiency of Modern Radio Receiving Apparatus, and while he did not try to cover this enormous field, he stressed a few very important points. The main thing that he brought out was that no one had yet gotten all that could be gotten out of one tube whenever he wanted to. This, he said was his one goal, and he believed that multtube circuits would give way when his goal was reached. He said that to play with undeveloped circuits was the work of experts, and it was merely wasted time for the average circuit boudn.

Mr. David Grimes was the next speaker. He started with fundamentals, giving the important names and dates connected with the rise of radiotelephony. Then by an analogy of comparing a transmitter to a lighthouse, he explained how waves were propagated, and the causes of fading and shielding.

Mr. Frank Parnes of the Chicago Herald and Examiner gave a few of his radio experiences.

Mike Guenney, the Mystery Man of Miloplex fame, then gave a very amusing talk in which he reviewed the talks of all the

other speakers. He told the BCL's that the amateurs were not responsible for the interference to their reception. Then he asked that the amateurs live up to the good reputation he had given them, and obey the quiet hours even a little more strictly. He told the BCL's that short antennae would help make their sets selective.

The meeting then adjourned because of expiration of the allotted time.

Minutes of the Milwaukee Radio Amateurs' Radio Club, Inc.,
Meeting of February 21, 1924.

The meeting was called to order by Pres. Howell, and the minutes of the two previous meetings were read by the Secretary. The Report of Business Manager Baird, as forwarded to Mr. Howell was read. Mr. Baird reported that he is now city manager of Kenosha, and that he has enrolled all amateurs in the league. Two relay stations are expected to develop there under Mr. Baird's guidance.

Mr. Catel of the Membership Comm. reported that the members were coming in again, and asked that the good work be kept up.

C.M. W.F. Szukalski Jr., reported that only fourteen stations turned in their reports to him last month, and the message total was only 100. He urged that more activity be shown.

George Mueller of the Papers Committee read excerpts from the Canadian Radio Bug, and the Chi. Iw. Post Radio Magazine.

Chrm. Metcalf of the technical Comm. reported that he was doing some experimental work on and around one hundred meters. He stated that he found an increased efficiency and watt output by working below the fundamental of his antenna, by putting variable condensers in his antenna and ground leads.

The Secretary proposed for membership John F. Norlach, Geo. W. Schubert Jr., Gaston W. Grignon, and John K. Karel.

The Program Committee reported that the next meeting would feature a talk by a representative of the Burgess Battery Co. R.E. Lathrop of the technical Committee then gave a very good talk on the use of mercury arc rectifiers for plate current supply. He explained that they could be used very well on sets with either ten watts or ten kilowatts, and gave a uniform voltage drop of fifteen volts, regardless of the original voltage. They have a very long life, and are highly efficient, though they require a little practice to learn to operate, and they present rather a problem to filter successfully, was his statement. He then gave details for the construction of an electrolytic condenser.

Mr. Felix F. Rajwanski presented a resolution drawn up by the South Side Radio Club offering to become merged into the WRAC. After a little discussion, it was moved, seconded and passed that the nine members of the South Side Radio Club be accepted into club membership in a body. Mr. Rajwanski then turned over the treasury of the South Side Club to Mr. Ryppenthal.

Minutes

Mr. Radwanski was voted an AKRL pin for his efforts in bringing in these members.

A number of quiet hour violations were announced, and a plea was made to adhere more strictly to the law.

The meeting then adjourned at 9:30. P.M.

Minutes of the Board of Directors meeting.

The first matter brought before the board was the campaign to nominate C.N.Crapo GVD Director of the Central Division. Volunteers to help spread this campaign were Howell, Nickel, and Szukalski, in addition to Mr. Catel the Campaign Manager, and the Secretary.

Mr. Catel suggested that a subscription list be made up for financing the campaign, and all present signed up. Mr. Crapo agreed to double the total.

The plans were outlined by Catel as follows:

Campaign thru the air by adding "Vote For GVD" when signing off. Campaign thru the mails by post cards and on GST cards.

Campaign thru the press by newspaper and magazine publicity, and advertisements in periodicals.

The board decided that no Sergeant at arms was necessary.

The Publicity policy of the club was discussed.

A motion was passed stating that all applicants for membership be approved by the board, in order to prevent undesirables.

The meeting then adjourned.

Minutes of the Milwaukee Radio Amateurs' Club, Inc.

Meeting of February 28, 1924.

The meeting was called to order by President Howell. After the reading of the minutes, Mr. Catel, Chrm. of the Mem. Comm. gave a report that showed that his committee was still pushing along.

Chairman Metcalf of the Tech. Comm. gave a report on receiving tubes. He spoke of the different kinds of tubes available, and their various advantages and disadvantages. He explained that distortion was nearly all due to regeneration. He recommended that C batteries be used in all audio frequency amplifiers. Incorrect grid condensers and leaks were also blamed for some of the trouble.

Mr. Howell reported a few cases of quiet hour violations, and warned offenders that the Radio Inspector would receive reports on persistent violations.

Mr. Mueller of the Publications Committee reported that plans were now under way to get into closer contact with the Science Department of the Library, and to subscribe to American and foreign radio periodicals and district publications.

The Program Committee Chairman, Mr. Howell reported that talks by representatives of the Jefferson and Kauland Companies would be featured on programs in the near future.

Mr. A.J. Helfrecht of the Engineering Department of the Burgess Battery Company, Madison, then gave a highly entertaining and instructive talk on the operating characteristics of Dry Cell Radio Batteries. He gave the history of the development of the B battery from the Signal Corp type to the navy type. The advantages of Dry cell A batteries ^{were} then spoken of, and then the C battery was discussed. Mr. Helfrecht warned against the improper connection of the C battery in the circuit. He touched upon the process of manufacture of the dry cell batteries, and passed around samples of partly assembled batteries. Then with the aid of charts, he showed the shelf and operating life of the different batteries, and their various physical and electrical characteristics. This part of the talk, while more technical, was certainly full of interesting information. Mr. Helfrecht has the happy faculty of mixing in just enough humor, and his talk was

highly enjoyed by all. The many samples of batteries which were on display were donated to the club, and sold at auction to the sixty persons present. The fifteen dollars and fifty cents which they brought were voted half to the treasury, and half to the Campaign Fund to elect Crapo ARRL Director.

The meeting adjourned at ten o'clock.

Minutes of the Milwaukee Radio Amateurs' Club, Inc.

Meeting of March 6th 1924.

The meeting was called to order by Pres. Howell, and the minutes of the previous meeting read by the Secretary. The report of W.M. Baird which had been sent in by mail followed he advised that legislation on radio matters should be pushed by us, by getting the proper legislation the bureau of standards and the radio inspection force would be greatly helped he also suggested that A.R.R.L. headquarters be notified that the South Side Radio Club has been absorbed by the club. The Pres. then reported his attendance at the Junior Ass'n. of Commerce Radio Club meeting and advocated the clubs co-operating with them.

The Membership committee thru its Chairman then reported one new member and brought out the fact that a large number of club members were not A.R.R.L. members and urged these members to join as it is a rule of the club that all members must also be members of the A.R.R.L. He also reported that at the last BD meeting a rule was passed that all applications for membership must be passed on by the board of Directors. C.M. Szukalski reported that the new O.R.S. application blanks were now ready for distribution. He also read a letter from headquarters on 100 meter work but said that if you have not the proper license "DON'T DO IT." He also reported that the T.M.E.R.L.C. was operating in the matter of interference incidentally reporting similar results in Hartford. Legislation requiring fees from the amateur's was also reported on by him.

Pres. Howell reported that he was not in the air as he is building a new low loss tuner.

Publication Committee Had nothing to report.

Chairman Metcalf of the Technical Committee reported that he had been appointed to the experimental section of the A.R.R.L. and read a long list of subjects from which the kind of experiments which one was interested could be chosen.

He then gave a very interesting talk on the perfect antenna as published in Radio Broadcast By T.M. Hull

The Secretary reported one application for membership which was referred to the Board. He also reported the progress made by in the campaign to elect Crapo 9VD Director from the central Div. The program committee then read a letter from Mr. Jewell and Mr. Marx, thanking the club for the fine reception and entertainment while they were here. He also reported that a gentleman from the Jefferson Coil Co. might give a talk before the club March 13th. He also asked for suggestions from the members as to the kind of program they would like in the event the speaker did not show up, and he was asked to again have some of the Ham stations described.

Pres. Howell then led a discussion on low loss tuners, giving Mr. Prahls record of receiving amateur signals from the States of Mo., Kan., Iowa, & Tenn., without any antenna or ground, on a 9ZN type tuner wound with no. 12 wire basket weave style. Mr. Crapo recommended the split secondary type of tuner giving its advantages.

Mr. Crapo ADM then gave his report which included among other things the report of the amateurs help during emergency's also the greater necessity for Radio Club organization. He also

also advocated the listing of O.R.S. with wavelength and operating hours, the wavelength and hours to be strictly adhered to, the delivery of msgs was also touch'd on.
Mr.C.E.Brown Chairman of the Junier AssN. of Commerce Radio Club then gave the aims and purposes of that club asking our club for and extending to it hearty co-operation, he also said that they would try and have at least one of their members present at all our meetings and invited us to do the same.
The meeting was then thrown open to general discussion and then the meeting adjourned.

Meeting of the Board of Directors.

March 6th 1924.

* Pres Howell opened the meeting with a general discussion about the publicity Chairman not getting out any special articals and that he seemed to be neglecting his duties so it was proposed that owing to his other numerous duties he be relieved of the position as publicity Chairman. A motion was then made second and carried that Mr. Pelacheck replace Mr. Dell As Publicity Chairman.

Mr. Pelacheck then resigned his position as Secretary and an election for a new Secretary was ordered by the Pres. Mr. Catel being the only one nominated, was unanimously elected. Mr. Pelacheck was then recommended for the position as league publicity correspondent but the matter was laid over to enable the Board to get in touch with 9 AZN.

A motion was made, second and carried amending the membership rule to read as follows:- All applications for membership must show an A R R L membership certificate or accompany it with an application for A R R L membership with the necessary dues in cash.

The application for membership by Emil R Falber 9 RM 2527 Chestnut Street was approved by the board.
Meeting then adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB? INC.
Meeting of March 13th 1924.

The meeting was called to order by Pres. Howell and the minutes of the previous meeting read by the Secretary. The new secretary was then installed.

The Pres. reported a communication from the legal committee on the so called white bill no. S. 2524 he advocated that the part of the bill containing the license fee be recommended, as this money would go to the radio inspectors department giving him more help etc.,. The section recommending a one man board was not advocated, as this would put radio in the hands of one man and if a man unfavorable to the hams should get in he could do a lot of harm to the game chasing all ham stations if he saw fit to do so.

The membership committee reported five new applications for #~~#~~ membership.

The traffic manager reported that the msg blanks were now available and could be had from 9 AAP at 34 cents a pad. He reported that the county was apparently free from spark transmitters, but advised that if there were any left they should stop for their own good.

The publicity chairman M. Mueller reported the addition of two new members to his committee Mr. Naff and Mr. Ceates, and advised that the committee would in the near future subscribe to some foreign magazines and anyone wishing to get the addresses of these foreign magazines could apply to him.

Mr. Naff then read several articles out of some ancient magazine (as he called them) and then offered these magazines to the members. Mr. Ceates then reported on a new R.F. circuit called a supergrid, this being a multi-centred rf. set using 8 variable condensers controlled on one shaft and with one dial. The first six tubes were rf. tubes but he did not say how many tubes were in the complete set.

Mr. Metcalf Chairman of the Tech. Committee then reported on how to burn out 50 watt tubes. He described the action that took place while it was burning out. Mr. Howell then interposed that much money could be saved if a safety gap were put in the circuit between the grid and the filament leads. he said everytime a spark jumped the gap it meant thirty dollars saved.

The Program Committee then reported that Mr. Szukalski 9 AAP would give a talk on the construction of meters at the next meeting. He also read a letter from professor C.M. Jansky professor of Elect. Eng. at the Univ. of Wis. Madison offering to give a lecture before the club at some future date.

He also read a very interesting letter from L. Metcalf ~~H. H.~~ who is attending the Univ. of Wis.

Mr. Blauert 9 ELV talked on the Racine Ham stations he had visited on a recent trip down there. He reported that he tuned several stations while there, also describing their stations in detail. Mr. Szukalski then reported on his trip to Chicago telling of his visit with Mr. Mathews D. Mgr. and of his very cordial reception by the radio inspector. He also described some of the Chicago Ham stations that he had visited, he told of 9 AAW having a one KW. tube which had blown after five minutes use also of a quarter K.W. tube in operation their.

He also told of a newly invented german transmitter which could be placed in a cigar box which had an output of 1 K. W. of power and could be run either by direct or alternating current this set is supposed to be put on the market next fall to sell for thirty five dollars.

The Treas. Mr. Ruppenthal then proposed to pass the motion to increase the fund to elect M Crape director and \$10.62 was paid. It was reported five applications for membership which were referred to the board for approval. Mr. E. R. Felber Jr. 9 RR 2527 Chestnut St. was then voted in as a regular member. Mr. Pelachek Publicity Chairman then gave his report. He also stated that in connection with the campaign, that he had given copy to 102 newspapers in the central division. He also advocated the club take up the offer of the Dial, a paper devoted to ARR.news, this paper offered a page of space to the Milwaukee club if they would secure fifteen subscriptions at 25 cents a year.

The meeting was then given over to general discussion and adjourned.

Attendance 56.

BOARD MEETING.

March 13th 1924.

The Meeting was called to order by Pres. Howell. A motion that the Treasurer be instructed to give the ass't. treasurer authority to collect all membership dues, keep all records pertaining thereto and turn ### over all money collected to the treasurer at least once a month. The secretary to be the ### ass't. Treasurer was second and carried.

A state traffic convention was also discussed but no action taken.

The Applications for membership of Oliver C. Kent 7HS Ira E. Drew 9 ABW, Edgar L. Reckweed 9 DBX, Thaddeus Hein 9CCH and William A. Eberl 9 DUB. for regular membership were approved by the Board.

The Meeting then adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of March 20th 1924.

The meeting was called to order by Pres. Hewell and the minutes of the previous meeting read by the secretary. C.M. Szukalski reported not much traffic.

A.D.M. Crapo reported a very interesting communication from headquarters asking for information on dead spots in Wis. the scarcity of messages was commented upon, the fact that relay stations now relayed their messages much further distances and the fact that most stations only wanted to work DX leaving many messages on the hook owing to the fact that nearby stations failed to work each other.

The Campaign committee reported that three thousand messages had been given to the various local transmitting hams to be relayed, that two thousand cards had been mailed leaving only the city of Chicago and the state of Michigan to be covered. The ad in QST and the ad in Radio # Digest was also reported. Co-operation of the Hams to sign off with Vote for 9 VD was again asked for.

Mr. Mueller Chairman of the publications committee reported from the Radio bug the Can RRL an article which dealt with a new wavemeter in use by the Can. Dept of Marine and Fisheries. The Technical committee through Mr. Nelson gave a talk on how to wind your own filament transformers he also showed a method whereby a burned rectifier tube could be again used giving the details and drawing the circuit used on the board.

Mr. Knaff reported on a superheterodyne and other trick circuits. This circuit Mr. Knaff explained really works. He again gave away a large number of old magazines.

The program committee reported the receipt of a letter from the Reuland Co. advising him that an engineer from their laboratory would be ready to deliver a lecture in the near future. He also reported that Mr. Ira Drew would describe the high power radio station # NPG at San Francisco next meeting.

The secretary reported two applications for membership which were referred to the Board of Directors. He also reported that from then on he would collect all dues, also calling the members attention to the fact that 90% of them were behind in their dues. M. Ira E. Drew 9 ABW 6103 Greenfield Ave. West Allis, William A. Eberl 9 DUB 343 37th St., Thaddeus Hein 9 AAP & 9 CCH 613 3rd Ave., Edgar L. Rockwood 9 DBX 1013 Bartlett Ave., and Oliver C. Kent 7 HS Apt. 20 229 Mason St., were voted in as regular members of the club.

Mr. Szukalski then gave a very interesting talk on the construction of the various kinds of meters which the amateur's use. He started with the galvanometer type explaining in detail its construction and uses, he also explained the iron van type thermocouple and milliammeter types, stating that in the near future he would bring before the club a meter 24 inches in diameter reading from 0-15 volts showing its construction and giving data so that the hams could construct their own meters at a great saving.

Mr. Pachek publicity chairman reported clipping 175 inches of news from the various papers so far this month. A motion was then made seconded and carried that the question of having the Dial as an official organ be referred to the Board. The meeting then adjourned.

There were 60 present.

Meeting of the Board of Directors.

March 20th 1924.

The meeting was called to order by Pres. Howell. A motion was made second and carried that the publication known as the Dial should not be chosen as the official club publication.

A motion was made second and carried that the Pres. appoint a committee to investigate the advisability of the clubs publishing its own organ.

The Pres. appointed Mr. Pelacheck chairman of this committee. Traffic convention as hand selected and the Pres. appointed himself to investigate the advisability of the clubs having a state traffic convention in connection with the Journal's Radio Show in the Fall.

The application of Daniel Krause Rt. 1 Box 193 Wauwatesa Wis., for associate membership was approved by the board.

The application for junior membership ##### from Harold Leew 3811 Sarnew Place was held over until he is able to join The ARRL.

The meeting then adjourned.

Board members present; - Mr. Howell Mr. Crape Mr. Szukalski Mr. Dell Mr. Catel Mr. Metcalf Mr. Cary and Publicity Chairman Mr. Pelacheck.

Meeting of March 24th 1924.

The meeting was called to order by the president and the minutes of the previous meeting read by the secretary.

The disission of the board not to use the Dial as an official publication was commented upon by the president.

The publicity chairman Mr. Polacheck reported that the Dial would be used as an unofficial organ until such time, that the club has its own organ. He also reported the trip to Racine made by ten members of the club, telling of the hearty welcome with which they were received. He also reported progress in the investigation of the advisability of the clubs having its own organ. O. M. Szukalski reported that the radio inspector that if the complaints against hams using fence does not stop he will cancell their licenses.

Publicity chairman Mr. Mueller reported several articles from some magazines. Mr. Knaff of the publicity committee again read some articles on ham news, saying that an eastern ham was working Italian and B 5GO on schedule, he also read an article on Mr. K.B. Warners being to the White Bill in its present form. His report was very interesting to the hams present.

A discussion on the heavyside layer was started by him and the theory of the heavyside layer was then explained by the president.

Chairman Metcalf of the Technical committee gave a talk on motor generators, explaining how to change a motor from ac to dc and how to make a generator out of a motor, giving ~~#~~ data etc. on how to do it.

Mr. Daniel Krause Rte. 1 box 193 Wauwatosa Wis. was elected to associate membership in the club.

The secretary reported that \$ 12.00 had been collected for dues at the previous meeting and that the expences were Mr. Baird for postage \$ 1.50 and the secretary \$ 1.50 for postage and supplies. He again called the members attention to the fact that most of them were behind in their dues. He also reported that at the following meeting he would read all the members names who were behind in their dues.

The program committee reported that Mr. L.R. Schmidt ex radio inspector now with the Monogram Co. would give a talk before the club at some future date, he also reported that he had invited an engineer from the Signal Electric Co. Menominee Mich. to give a lecture before the club. He then introduced Mr. Ira Drew as the principle speaker of the evening. He was greeted with much applause. Mr. Drew gave a long and accurate account of the stations NPO NPG and 6 XAG, which he had visited. He described NPO as being situated on an Island in the Philipines the station is located in a marsh, the antenna is 600 ft. high and consists of 20 wires on a ~~spreader~~ 32ft. spreader, the counterpoise consists of 20 wires on 60ft. spreaders 50ft. above the marsh, the shack was built on posts 20 ft. above the marsh, and the only way to reach it was with a boat. The station is equipt with remote control and has a range of from 5000 to 6000 miles on 600 and 13600 meters, the transmitter consists of an ~~arc~~ cooled Poulsen arc, the arcs being 2 3/4 inches long, radiating ~~#~~ 37 amps. on 13600 meters. The receivers consisted of an Radio Specialty Co. receiver and a DeForest honey comb coil set with two stage amplifier. All equipment at this station was in duplicate so that if one broke down the other was ready. They also had an old 15 K.W. spark set. The antenna insulators were six feet long and one foot thick and had to be hoisted in place with a crane anyone crossing the transmitting room had to hold down their hair.

The equipment at NPG is similar to that at station NPO it transmitts on 150 and 17145 meters its range being 5000 miles, it also is a 550K.W. arc set, the station is situated on a hill in San Fransisco Bay, the antenna is fan shaped and is 650 ft. high the remote control is similar to that at NPO, the receivers used were a DeForest honey comb coil and a crystal set. The station WYR a 5 K.W. arc station was also described. Station 6 XAG was described as having 19 antennas and a very fine laboratory for experimental purposes.

The president then read a letter from Mr. Flewelling stating that his ~~new~~ call is 9 ~~XBG~~ XBG and that he desired reports on his signals on about ~~metres~~ meters. The Program committee reported that Mr. Bates would describe his station 9 NW at the next meeting.

Mr. Crapo Gave his traffic report for the month saying that the first district which has the most transmitters was one of the lowest in message totals. He reported that messages handled by the districts were as follows. Dist. # 1- 453 # 2- 618 # 3- 517 # 4- 743 # 5- 100. as there was no further business the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of April Third 1924.

The meeting was called to order by President Howell and in the absence of the Secretary the minutes were read by Mr. Polacheck who also acted as Secretary.

Business Manager Mr. Baird was present but had no report to make.

City Manager Szukalski was not present owing to an accident in which his father and himself were badly burnt.

Mr. Crapo announced that the Q.R.S. certificates would soon be available and showed a sample to the members.

Mr. Mueller Chairman of the Publications committee reported that he had subscribed to two magazines and had written to a number of others for samples. Mr. Knoff of the Publications committee read a letter from the Crosley Co., stating that they were developing a vacuum tube which would not conflict with the present patent law and which would soon be on the market. He also reported that the Bureau of Standards will be broadcasting on ten meters.

Mr. Metcalf Chairman of the Technical committee reported that Mr. Blauert is now a member of that committee. Mr. Blauert reported on the construction of the tower at 9 ELV. The tower is all made of wood and costs about from \$ 40.00 to \$ 50.00 it is 70 ft., high. Its shape is triangular and reinforced by lattice work to a height of 47 ft. on top of this section there is a pale 33 ft. high, it has 5 coats of paint and its picture will appear in QST.

Mr. Baird reported on the activities of the campaign for director from the Central division and said that there were now four candidates in the field they being Mr. Crapo from Milwaukee Wis., Mr. Darr from Detroit Mich.

Mr. Windom from Columbus Ohio, and Mr. Hain from Rockhouse Ill.

Mr. Polacheck Publicity Chairman reported that he had clipped 464 inches of space from various publications last month, he also put in a plea for more ham chatter and special articles on stations.

Mr. Howell advised the members to write up their club talks for publication. He then gave a talk on the History of Radio. He explained that the history of radio was very important or rather that radio played a very important part in history. He told of Mr. Baird being interested in the industrial side of radio and that he was interested in the technical side of radio. He spoke on the early electrical foundations and the early work on electro magnetic waves and how the early experimenters worked for the love of radio and not for material gain. He touched on Herzer's work and Marconi's work telling of the invention of the secherer and dechener. He then described the first applications of radio telegraphy and the first telephone work by Fessenden and of Fessenden's early experience with the CW alternators, he then told of Heavyside's work and his theory of the heavyside layer. The Fleming valve patent and the DeForest audion bulb was also explained. He spoke on the poulson arc telephony and the radio act of 1910 also telling about the inventing of the Kloster decremeter in 1912. He summed up his talk with the modern work on transmitters receivers etc.

There being no further business the meeting adjourned.

Board of directors meeting. April third 1924.

The matter on the official organ was talked on and all those present were for it.

The following applications were brought before the board for approval and were held over until proof of membership in the ARRL had been established. James Verburgt 3902 Lisbon Ave. Thaddeus CIESZINSKI 958 Windlake Ave. Walter Schuknecht 524 Van Buren ST.
The Meeting then adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB INC.

Meeting of April 10th 1924.

The meeting was called to order by president Howell and the minutes of the previous meeting read by the secretary.

City mgr. Szukalski had nothing to report.

Mr. Polacheck publicity chairman reported that in his estimation our candidate for director had been slighted, in that part of the ballot giving the candidates biography and that all members should send in a letter of protest, quoting parts of the one he wrote.

Mr. Mueller publications committee reported an article from amateur radio the official publication of the second district, (Whos editor happened to be present,) Mr. Knoff of the publications committee reported some articles on Mr. Hiram Preoy Maxim's trip to Europe telling of an international amateurs union to be formed with Mr. Maxim as the President. This was heartily applauded by the members. He also read about Mr. Maxim arranging some tests with the French Amateurs on April 25th. He also read an article on the broadcast situation which claimed that it costs a broadcasting station \$ 5000.00 per week to operate.

The secretary reported all members that were behind in their dues, this caused a lot of members to flock to him after the meeting and pay up. The President announced the receipt of 9 OJO'S article together with blue prints and same is to be published.

The President then introduced Mr. C. Bates 9 HW as the speaker of the eve. Mr. Bates discribed the early days of radio and then discribed his own stations and showed slides of it.

Mr. Laufer 2 AQP Editor of the AMATEUR RADIO and Secretary of the Bronx Radio Club., was then called upon to give a speach and he gave the members a very interesting talk, he urged the members to cooperate with the eastern club and eastern amateurs saying that in this manner closer touch and better understanding could be had by all. He also mentioned that the fame of the Milwaukee Club had spread to the eastand that in his travels between Omaha and Minneapolis he heard that the club meets Thursday nights so he arranged to be here on our meeting night. He also told of the service the eastern hams were giving to the public, stating that the hams back east had entirely equipt and manned the life saving service with radio. He spoke of having experimented with 16 to 20 meter work saying that he was one of the first to work French 8 AB. Then amidst loud applause Mr. Laufer put in his application to the club.

Mr. R. S. Rose 9 DRR Marquette Mich. was then introduced and greeted with much applause, he talked on the service the amateurs were giving during emergency's citeing several cases, then also amidst loud applause he put in his application to join the club.

Mr. T. Sohaefer 9 CLG Slinger Wis. also was a visitor and was called upon to say a few words to the boys which he did.

The meeting was then thrown open for general discussion and Mr. Radwanski announced that anyone wishing any aluminum could get any quantity of it at 229 Lake St. City. Mr. Hatch 9 BBY announced that he had some good dope on reflex circuits, and offered the information to the members.

There being no further business the meeting adjourned.

Board of Directors meeting April 10th 1924.

The applications of Mr. E.E. Laufer 2 AQP 699 East 137 St. New York City, Robert S Rose 9 DRR Marquette Mich., as regular members and Helmar Heuer 457 Mason st Apt. 7 Milwaukee as associate members were approved by the board. There was no further business so the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of April 17th, 1924.

The meeting was called to order by President Howell and the minutes of the previous meeting read by the Secretary.

The Publicity Chairman Mr. Pelacheck reported a letter from ARRL headquarters stating that the mistake on the ballot was an unintentional oversight and that it had been corrected and new ballots sent out.

The campaign manager reported the change in the ballot and urged all members to be sure and send in the second ballot and to urge everyone through the air to do the same.

Mr. Pelacheck then reported a telegram from the Chicago Tribune saying that the Detroit Bunch are asking for a third ballot and asking our view on it, Mr. Pelacheck wired back our side saying that we had not asked for a new ballot, that we had only called the executives' committees attention to the error and that they had sent out the second ballot of their own accord and that while we are not against a third ballot we think it would make a farce of the election.

He also read a letter from Mr. Warner on the White bill.

A D M Grapo reported nothing new but that he is trying to line up the stations from upstate for the news gathering experiment.

Mr. Radwanski reported that several stations could not wait for 10:30 PM to come so they started earlier and urged that this practice be stopped. D S Dell reported that he was out of the air at present and had lost contact with the bunch but he ask all hams in his district outside of Milwaukee to send in their reports to him.

C M Szukalski reported that Milwaukee would have some big message totals this month perhaps leading the state and country.

Mr. Coates of the publications committee reported an article from the French Army Corp which told of experiments on 2 meters. He also read an article on vacuum tube construction and an article on the tax on radio sets.

Mr. Knoff read an article on operating during quiet hours and of hams starting to QO at 10:25 P M and not signing until after 10:30 P M

He also read an article on the new International Radio Amateurs Union, which is to have a meeting in France during the Easter holidays.

Mr. Blauert of the Technical committee gave a talk on how to use and make a rectifier for B batteries illustrating it with diagrams on the board. The President then announced a board meeting after the regular meeting, he also gave some precedents saying that the old custom of hams using green ink and wearing derby hats was dying out also the custom of reserving the side seats at the meeting hall for officers and old members of the club. He urged that these precedents be again established.

The Secretary reported that he had collected \$ 12.00 for dues and no expedititures. Mr. E. E. Laufer 2 SQP 699 E. 137th St New York City, and

Mr. Robert S. Rose 9 DRR 410 E. Ridge St. Marquette Mich., were voted in as regular members, Mr. Helmar E. Heuer 457 Mason St., Apt. 7 City, was # was voted in as associate member.

The President then introduced Mr. Knoff Radio Editor of the Milwaukee Journal as the speaker of the evening. Mr. Knoff talked on his experiences as a newspaper radio Editor. He stated that the radio column must not be too technical but must interest as many people as possible saying that if he got to much technical dope in the column he would be fired. He told of the old time static machines and old spark sets giving several anecdotes which were greeted with hearty laughter. He also demonstrated how he burned out a new N tube the first time he tried it, showing the tube. He told of starting a radio club at Monroe and that half of the members were boys in knee pants showing that the younger people learn more quickly than the older people. He told of a superstition that eliminated static by having a sack filled with some secret substance which was supposed to absorb static, this was greeted with loud laughter. He concluded his talk by saying that radio is oversold and that people expect too much from radio. The President then announced that all members should write the Milwaukee Journal and express praise for the Ham chatter column.

There being no further business the meeting adjourned.

Board of Directors meeting.

April 17th 1924.

The meeting was called to order by President Howell.

The application of Mr. R. G. Foster 9 ACG 909 Hayes Ave. Racine wis. was approved by the board.

Mr. Polacheck reported on the advisability of the clubs having an official organ. He said that it would cost \$ 30.00 an issue of 500 copies and that this would require about \$ 50.00 worth of advertising. The board discussed the subject and the consensus of opinion was that the matter be tabled for the present.

The Board instructed the secretary to make up a resume of the years progress of the club. It was not definitely decided whether to print it or have it mimeographed.

There being no further business the meeting adjourned.
Those present were, Mr. E. T. Howell Pres., Mr. Cate Secretary, Mr. Orage
Mr. Szukalski, Mr. Dell, Mr. Cary, Mr. Nickel and Mr. Polacheck.

Mr. Metcalf was absent.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of April 24th 1924.

The meeting was called to order by President Howell and the minutes of the previous meeting read by the Secretary.

C.M. Szukalski reported that this months message totals were the best he has ever received since he started, the total for this month being 821 messages. He urged the hams to keep this up. He also wants a list of reliable stations that can be worked consistantly, so that he can prepare a schedule for the newspaper experiment.

D. S. Doll reported a total of 931 messages for the 1st district, he complimented the hams on this good work and told them to keep it up. He also asked the hams to report to him even if they did not handle traffic as this would keep him informed on how many stations were interested in traffic.

A.D.M. Grapé read a letter from the second district Council #44 which thanked the club for the fine reception given to Mr. Laufer 2 AQP and also asked the members #44 to contribute their talks for publication in their magazine, the subscription rates in lots of ten or more is one dollar per year.

Publicity Chairman Mr. Polachek reported several articles from Chicago newspapers in regard the election campaign. He also asked the hams to hand in more ham chatter, and to write to the Milwaukee Journal and compliment the ham chatter column.

Mr. Nelson of the Technical committee reported some stations which he had visited on a recent trip to Lafayette Ind. He described the station at Purdue University also the stations 9 DWA 9AVP and the broadcasting station WOED. The report of the Secretary and membership committee were combined. Two membership applications were reported and the members urged to keep up the steady flow of applications, the club now has 165 members in good standing.

Our mailing list has 265 names this leaves 100 prospects who should brought in as members.

The Secretary reported that \$ 4.00 had been collected at the last meeting and no expenditures, and informaly reported that there now was about \$ 110.00 in the treasury. R. C. Foster 9 AOC 909 Hayes Ave. Racine Wis was voted in as regular member. Mr. Thaddeus Giesecky 958 Windlake Ave., was voted in as associate member.

The program committee reported that Mr. E. T. Flewelling would give a talk at the next meeting and that Mr. B. Chremy would give a talk at the meeting of May 8th. He than introduced Messers Crittenten and Hagn 9 RC of Chicago Ill., who gave a very interesting talk on the History of 9 RC.

Mr. Crittenten said that 9 RC started out as a spark station but that it was won over to cw in December 1923 when with a 50 watt tube they worked all districts in one night. This was increased to 250 watts shortly after but the 250 watt jug lasted only 1 1/2 months when it went west. They then secured the 500 cycle alternator from old 9 ZN and from then on tere up the air. He also discribed the North Shore Radio Club Of Chicago. Mr. Hagn then told about the Executive Council of Chicago and how it started he said that it is similar to the Milwaukee Club that they have technical talks and that they try to eliminate all the QRM around Chicago they have also eliminated all spark stations. He said that the fame of the Milwaukee club was well known in Chicago and that we were very highly thought of there. He said that up to the time 9 AAW got their 250 watt jug 9 RC was the Highest powered station in Chicago.

The president announced a short board meeting after the regular meeting. Mr Radwanski offered his services as editor of the joke column in the proposed club organ and made a plea for financial support of the project, starting the ball a rolling with a subscription of one dollar. He was appointed editor of the joke column and assigned to get the column in shape for publication. The meeting then adjourned.

Board Meeting.

The meeting was called to order by President Howell. The application for associate membership of Mr. Eugene Wulff New Holstein Wis was approved. The application of Arnold L. Colpitts 578 56th Ave West Allis was referred to Mr. Doll for investigation. There being no further business the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB INC.

Meeting of May 1st 1924.

The meeting was called to order by President Howell and the minutes of the previous meeting read by the secretary.

The President announced that all except the most important committee reports would be dispensed with.

Publicity Chairman Mr. Polacheck thanked the stations that had cooperated with him in getting the news experiment started and announced that prizes amounting to fifty dollars would be distributed in the near future.

Mr. Kneff commented on the experiment and said that it was the result of reading an article in QST on rubber stamp messages and other useless transmission and that this would stimulate the hams all over the state for real traffic.

The Secretary reported the receipt of sample copies of Amateur Radio and that he would take subscriptions for it urging the members to subscribe as it is purely a ham magazine published by the second district council.

He also read a report of the Director campaign fund.

Mr. Arnold Colpitts 578 56th Ave. West Allis Wis was then voted in as associate member. The President then announced the presentation of the Waukegan to Mrs. Flewelling at a dinner given in honor of Mr. & Mrs. Flewelling.

He then introduced Mr. Flewelling and his subject was

Dielectric losses in transmitters and receivers. He told of his recent trip through out the country and of his being asked numerous times how radio clubs should be started and run and he always held up the Milwaukee club as an example of how to run a club successfully. He spoke about radio being limitless and that the surface had just been scratched and that there is still a great deal to be learned about radio. He gave descriptions of dielectrics, air being the best gas next glass hard rubber porcelain and mud then followed in the order named.

He spoke on the difference of daylight and night transmission and what effect clouds had on fading. He told of station 9 CT and 9 XGB working on 70 meters. He also explained how he used 4000 feet of antenna wire in two weeks testing out the different types and kinds of antennas. He said that he was working under the most unfavorable conditions so that if anything was accomplished it would apply anywhere. He said that he wants to see radio grow and grow fast and predicted that hams would be able to communicate anywhere around the globe soon. He also talked on low loss tuners saying that by the elimination of dielectric losses in the field is the main thing illustrating his points on the board with diagrams. He passed around a coil of the basket weave type saying that this was his idea of a low loss coil.

He said that anyone interested in dielectric losses should obtain the Bureau of Standards publication Volume 13 No. 1 of June 1916. He concluded his talk by answering numerous questions ask by the members, and amidst great applause the president thanked him for his splendid talk.

Mr. Ray Hatch 9 BBY then announced that he had heard WNP early in the morning of May 1st, and that he heard 5 LR and 5 AAJ arrange a schedule with WNP for May 2nd at 1:30 AM and advised all those interested to listen for WNP.

There being no further business the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of May 8th 1924.

The meeting was called to order by President Howell and the minutes of the previous meeting read by the Secretary.

The President announced that the Milwaukee Journal had left a supply of their last sunday's supplement and that the members should help themselves to them.

Mr. Mueller Chairman of the publications committee announced the receipt of the first copy of the British magazine and read several articles from it. Mr. Knoff read some articles on interference and an article on a universal language which will be needed when the hams start communicating around the earth.

Mr. Polachek reported the recent visit to Kenosha to ~~see~~ Mr. Baird and his resurrected spark station. He described the station in detail and told of having had a very good time. Mr Szukalski and Mr. Oatell accompanied him on this trip. He also gave a report as publicity Chairman and said that Milwaukee lead the central division with 474 inches of clippings.

Mr. Blauert of the Technical committee reported on reception through static and local interference, he told of using a 4 foot loop with a condenser which worked very satisfactorily and that static could be reduced by receiving signals without the antenna switch in the receiving position thereby using the O.T. of the transmitter as a loose coupled antenna coil. He claimed that he heard 6th & 7th district stations in this manner.

The membership committee reported the inauguration of a new method of securing members by forming a so called IN AND OUT CLUB. Which he explained in detail.

ADM Grapo read several articles from his new bulletin called BADGER ARRL NEWS. This bulletin will only be received by those who send in reports.

The Secretary reported that he had sent out bills to all diligent members and that he would like to see all members pay up. He reported that \$3.25 had been collected at the last meeting and no expenditures. Mr. Eugene Wulff of New Holstein was then voted in as an ~~as~~ associate member.

The program committee announced that MR. Doll would give a talk on Acoustics, at the next meeting. He also read several letters one from 9 RC Thanking the hams for the good time shown them one from T. Schaefer 9 CLG Slinger Wis. offering his transmitter and receiver for sale, one from the Wireless age asking for a copy of Mr. Flewellings Speech and one from the Wisconsin Division of Markets.

The President then introduced Mr. Chremy who gave a very interesting talk on Fundamental considerations of the A.C. Theory. He explained that there several kinds of A.C. currents and explained how this was possible illustrating his points with drawings on the blackboard.

The President then announced that a board meeting would be held after the regular meeting

he also read a humorous report card received from 9 CVO. He also ask for suggestions as to weather the club should have an outing or dance or picnic. The Secretary then started a discussion of low loss tuners telling of the one he built with the coils supported on hard rubber rods thereby eliminating most of the dielectric losses in the electro magnetic field of the coils. He illustrated it with a drawing on the board.

There being no further business the meeting adjourned.

MEETING OF THE BOARD OF DIRECTORS.

The meeting was called to order by president Howell.

Action was made second and carried that the club appropriate \$ 60.00 for a complete mimeograph machine.

The news by radio experiment was discussed and Mr. Grapo advised that he would get together with Mr. Szukalski and Mr. Knoff and get the notices out to the hams in the city and state. There being no further business the meeting adjourned. Those present were Mr. Hywell Mr. Grapo Mr. Carey Mr. Metcalf Mr. Nickel and Mr. Catel.

Meeting of May 15th 1924.

In the absence of President Howell the meeting was called to order by Vice President Szukalski and the minutes of the previous meeting read by the Secretary.

Publicity Chairman Polacheok reported that the news experiment was comming along nicely. He also said that as far as he knew the Ham Chatter Column is the only one in the country that gives the daily news of the Hams. He also reported on the election of the Central Division Director saying that Mr. Darr had received 870 votes Mr. Crapo 282 Mr. Cain 170 and Mr. Windom 80 votes.

GM Szukalski exhibited the new report cards saying that only those who sent in their card would receive a copy of the Badger ARRL News. He said that he had mailed all those interested in the news experiment a letter and that he would like to receive an answer stating wheather the schedules allotted to them would be adhered to.

Mr. Kneff of the Publications Committee then read several articles one about the heavyside layer and one on ham news in New York paper. Mr Coates read an article from Radio News.

Mr. Metcalf Chairman Technical Committee read a letter on the low wave tests to be held from stations NKF, ~~NKF~~ and ~~NKF~~ in France, these tests will be on wavelengths from 25 to 125 meters. Mr. Blauert explained how he had revived a burned out 50 watt tube.

The Secretary reported that \$ 12.50 had been collected for dues at the last meeting, expenditures \$ 3.00. He also read a letter from Amateur Radio acknowledging the receipt of 12 subscriptions. The membership committee reported that the IN AND OUT CLUB had been started and that all its members should bring in their new member as soon as possible.

The Treasurer reported a balance of \$ 99.00 collected \$ 36.00 Total \$ 135.00
Expenditures \$ 90.00 present Balance \$ 45.00

Mr. Dell was then introduced as the speaker of the evening and his subject was The Construction of loud speakers. He told of the difficulty experienced in getting loud speakers to reproduce faithfully explaining where the difficulty lies in the various types. He also explained in detail the construction of four types of electro magnetic loud speakers illustrating them with drawings on the blackboard. In concluding he said that there would soon be loud speakers that would be free from the common defects of the present ones.
A general discussion then followed, and as there was no further business the meeting adjourned.
At a short board meeting the applications of Messrs SCHUCK NOLAN & JUSTRAST were approved.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB, INC.

Meeting of May 22nd 1924.

The meeting was called to order by President Howell and the minutes of the previous meeting read by the Secretary.

Mr. Polashock chairman of the publicity committee reported his recent trip to Chicago, he told of visiting Mr. Mathews and explained to him the manner in which the second ballot was issued by headquarters. He also visited Mr. Flewelling and Mr Buckley.

Mr. Mueller of the publications committee reported some articles out of a British magazine, the first article described a new capacity microphone and the second a transmitter and receiver built into a cabinet 7 X 7 inches. He also read an article that said that British hams were forbidden to use CQ.

The Technical committee Chairman Mr Metcalf gave a short history on long and short wave tests.

Mr. Howell reported the activities of the program committee saying that he had written 33 firms or speakers from out of town and that only 26 or 81.3 % had answered, and that only 9 speakers were finally obtained, this is 28 % of all those written to.

The membership committee reported one new membership application and also called a meeting of the membership committee to formulate rules and regulations for the IN AND OUT Club.

The Secretary read several letters that were received during the week, he also reported that \$ 7.00 had been collected at the previous meeting. He also urged all committee chairmen to turn in their reports for the clubs yearly review. Mr. Fred E. Schunek 4702 Beloit Rd. West Allis, Mr. Martin A. Nelan 505 Seott St., and Mr. Frank J. Jutrasz 924 1/2 Orchard St. were then voted in as associate members.

The Treasurer reported a balance of \$ 42.12 in the treasury.

The president then read a letter from the Wheaton Radio club telling of there traffic convention which will be held in Wheaton Ill May 31st 1924.

There being no further business the meeting adjourned.

Minutes of THE MILWAUKEE RADIO AMATEURS' INC.

Meeting Of June 5th 1924.

The meeting was called to order by president Howell and the minutes of the previous meeting read by the secretary.

C.M. Szukalski reported the change of quiet hours from 7 PM. instead of 8 PM. These hours to be in effect until Oct 1st.

Mr. Polacheck Chairman of the Publicity committee reported the largest total of news items in the existance of the publicity department, He reported a total of 748 inches for May of which the Journal had 434 inches. He also read a letter from Mr. Darr 8ZZ Central division director .

He also announced that the news by radio stunt would close next Teusday at midnight Mr. Knoff of the publications committee reported on the 2nd District convention to be held in New York June 7th.,.

The Technical report of Mr. Metcalf was on super low loss tuners. Mr. Blauert reported the Wheaton Convention.

The Treasurer Reported a Balance of 34.62 in the treasuary.

There being no further business the meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS' CLUB INC.

Meeting of June 12th 1924.

The meeting was called to order by President Howell.

In the absence of the secretary Mr. Polacheck was appointed temporary Secretary.

The meeting being the last of the season a regular ham fest was indulged in by all
C.F. Bates 9 HW Made a practical demonstration of the method of obtaining Char-
acteristic curves of vacuum tubes.

A new method of keying was described by J. Meyer 9 BXH.

MR. Crapo 9 VD led a discussion to determine the clubs policy in recommending
the allotment of low wave bands for amateurs experimentation, the preferred
waves being 4 to 5 meters 43 to 48 meters and 80 to 85 meters.

There being no further business the meeting adjourned until Sept 18th 1924.

END